

REMARKS

Claims 1 - 15 remain active in this application. Claims 16 - 20 have previously been canceled. New claims 21 - 25 based on original claims 1 - 5 have been added. Support for the amendments of the claims is found throughout the application, particularly in Figure 1, 9 and 25A and the description thereof in paragraphs 0018 - 0019, 0028 and 0037 - 0039. No new matter has been introduced into the application. The continued indication of allowability of the subject matter of claims 6 - 9 and 12 - 14 is noted with appreciation.

Claims 1 - 5 and 11 have been rejected under 35 U.S.C. §102 as being anticipated by Krivokapic et al.; the Examiner continuing to apply a product-by-process analysis thereto and asserting inherency in regard to claims 3 and 4. Claims 10 - 15 have additionally been rejected under 35 U.S.C. §103 as being unpatentable over Krivokapic et al. in view of Bae. Both of these grounds of rejection are respectfully traversed for the reasons of record, particularly as pointed out in the response filed December 19, 2005, which is hereby fully incorporated by reference and the further remarks provided below.

It has previously been pointed out that a product-by-process analysis is not appropriate to the claims as they now stand. The recitation of "formed in alignment with..." is manifestly a structural recitation defining a location of a structural feature and not a recitation of any particular methodology of manufacture. Therefore, the application of a product-by-process analysis is completely inappropriate to the present claims and yet such analysis appears to be the sole basis for grounds of rejection based on Krivokapic et al.

As further previously pointed out, the application of a product-by-process analysis to a claim based on a reference which appears to be similar does not negate salient features of the invention but merely shifts the burden of demonstrating differences to Applicant as has been done in the remarks filed December 19, 2005. Specifically, it was noted that locating the film discontinuity in accordance with the gate structure allows control of boron diffusion and limitation of overlap capacitance. Such location also allows control of conduction channel depth and/or precise application of stresses to the conduction channel from with the substrate and directly adjacent to the conduction channel. None of these benefits are available from the structure of Krivokapic et al. in which the semiconductor material is epitaxially grown through the discontinuity and the location of the nickel silicide gate structure location is decoupled from the location of the discontinuity by both the epitaxial growth of silicon, the interposition of a dielectric 34 and the recrystallization process which serves to locate the gate structure "in the middle of the amorphous silicon layer 40" and only secondarily, incidentally and indirectly to the discontinuity in film 30, as clearly indicated by the context of column 2, lines 51 - 55. Therefore, it is respectfully submitted that, even if a product-by-process analysis is (*arguendo*) properly applied, Applicant has clearly met the shifted burden of proof of differences between the structure claimed and that disclosed by Krivokapic et al. and thus shifting the burden back to the Examiner to otherwise demonstrate anticipation or obviousness of the claimed subject matter; which the Examiner has not done and has thus failed to make a *prima facie* demonstration of the propriety of either of the

grounds of rejection based on Krivokapic et al. which the Examiner continues to assert.

Additionally, as noted above, the Examiner asserts inherency in regard to claims 3 and 4. Specifically, the Examiner asserts that "the insulator film (30) of Krivokapic (sic) can inherently be a stressed film." In this regard, it is respectfully pointed out that an assertion of inherency in a rejection for anticipation is only proper when the "allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" (MPEP §2112, citing Ex parte Levy, 17 USPQ2d 1461 (Bd. Pat. App. & Int., 1990), emphasis in MPEP). The very language used by the Examiner amply indicates that such is not the case here. Further, it is clear that there is no suggestion of exploitation of or derivation of any benefit from insulator layer 30 being a stressed film and thus there is no basis in Krivokapic et al. for finding obviousness in regard to such a feature. Therefore, in addition to the impropriety of the asserted grounds of rejection due to the improper product-by-process analysis and failure to show anticipation or obviousness of differences in the claimed subject matter which the Applicant has demonstrated in response to the Examiner's (improper) analysis of the claims, shifting the burden back to the Examiner, the asserted grounds of rejection are improper due to the unsupported and improper reliance on inherency. Bae does not mitigate any of these clear and determinative deficiencies of Krivokapic et al. or the clear errors in analysis of the claims, assertion of inherency or analysis of the claimed subject matter as previously pointed out and incorporated herein by reference.

In view of the foregoing, it is respectfully submitted that the grounds of rejection maintained by the

Examiner are clearly in error and untenable. Accordingly, reconsideration and withdrawal thereof are respectfully requested.

Further, in an effort to satisfy the Examiner, additional new claims based on claims 1 - 5 have been presented; as to which the above grounds of rejection are even more clearly inapplicable. These claims are modeled on original claims 1 - 5 but the language defining the location of the film discontinuity has been revised and further recitation of structure in a location defined by the discontinuity for performing functions and obtaining meritorious effects of controlling the depth of the conduction channel at a dimension less than the distance of the film from the semiconductor surface or applying stress to the conduction channel not available from the structure of Krivokapic et al., either alone or in combination with Bae has been added. Therefore, it is respectfully submitted that the presently asserted grounds of rejection are clearly inapplicable to claims 21 - 25 and allowance thereof is respectfully requested.

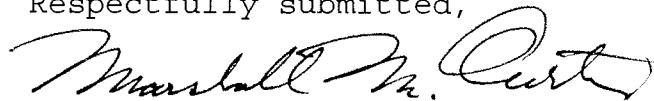
Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit

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any overpayment of fees to Deposit Account No. 09-0458 of International Business Machines Corporation (E. Fishkill).

Respectfully submitted,



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